Amendments to the Specification:

Please replace the paragraphs starting with "SUMMARY OF INVENTION," beginning on page 4, lines 3-17 with the following amended paragraphs:

In order to solve the above and other problems, according to a first aspect of the current invention, a method of edge enhancement, includes the acts of: extracting a first high frequency portion in a first direction of data representative of relative light intensity of a reference pixel; extracting a second high frequency portion in a second direction of data representative of relative light intensity of the reference pixel, the first direction being perpendicular to the second direction; outputting selected data from the first high frequency portion and the second high frequency portion; determining a correction coefficient based upon a sign and a value of the extracted high ~~frequency portion of~~reference pixel in the data, the sign being indicative of a relation between the relative light intensity of the reference pixel and that of pixels surrounding the reference pixel; and correcting the selected data based upon the correction coefficient.

According to a second aspect of the current invention, system for edge enhancement, includes: an extraction unit for extracting a first high frequency portion in a first direction and a second high frequency portion in a second direction of data representative of relative light intensity of a reference pixel~~;~~, the first direction being perpendicular to the second direction; a mixing unit connected to said extraction unit for outputting selected data from the first frequency portion and the second high frequency portion; a determination unit connected to said ~~extraction~~ mixing unit for determining a correction coefficient based upon a sign and a value of the ~~extracted high frequency portion~~reference pixel in of the data, the sign being indicative of a relation between the relative light intensity of the reference pixel and that of pixels surrounding the reference pixel; and a correction unit connected to said determination unit and said extraction unit for correcting the selected data based upon the correction coefficient.

According to the third aspect of the current invention, a method of edge enhancement, including the acts of extracting a high frequency portion of data representative of relative light intensity of a reference pixel; limiting the data based upon a predetermined range to generate limited data; determining a correction coefficient based upon a sign and a value of the reference pixel in the data, the sign being indicative of a relation between the relative light intensity of the reference pixel and that of pixels surrounding the reference pixel; and correcting the limited data based upon the correction coefficient.